

VARTAPETOVA, V.G.

Sinus venosus of the placenta. Akush.i gin. 37 no.2:30-34 P '61.  
(MIRA 14:3)

1. Iz kliniki akusherstva i ginekologii (zav. kafedroy - prof.  
L.S. Persianinov) lechebnogo fakul'teta II Moskovskogo meditsin-  
skogo instituta imeni N.I. Pirogova.  
(PLACENTA)

VARTAPETOVA, V.G.

Effect of the size of the placenta on the course of labor and  
puerperium. Sov.med. 24 no.3:85-89 Mr '60. (MIRA 14:3)

1. Iz kliniki akusherstva i ginekologii lechebnogo fakul'teta  
(zav. kafedroy - prof. I.F.Zhordania) II Moskovskogo meditsinskogo  
instituta imeni N.I.Pirogova (dir. - dotsent M.G.Sirotkina).  
(PLACENTA) (LABOR) (PUERPERIUM)

VARTAPETOVA, V.T., kand. med. nauk

Diagnosis of the bursting of waters. Akush. i gin. 39 no.4:  
89-92 JI-Ag'63 (MIRA 16:12)

1. Iz kafedry akusherstva i ginekologii (zav. - chlen-korrespondent AMN SSSR prof. L.S. Persianinov) II. Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i roditel'nogo doma No.23 (glavnyy vrach - kand. med. nauk R.L. Zak).

VARTAPETYAN, B. B.

USSR/Biology, Plant Physiology - Carbon Dioxide, Isotopes

1 Aug 52

"The Movement Through Plants of Carbon Dioxide Introduced by Way of the Roots,"  
A. L. Kursanov, Corr Mem, Acad Sci USSR, N. N. Kryukova, B. B. Vartapetyan, Inst Biochem  
imeni A. N. Bakh, Acad Sci USSR

"Dok Ak Nauk SSSR", Vol 85, No 4, pp 913-916

States that concept of nourishment of plants through air is well established, but does not explain the large yields obtained in intensive agriculture. Expts with  $\text{NaHC}^{14}\text{O}_3$  and  $\text{C}^{14}\text{O}_2$  demonstrated that  $\text{CO}_2$  is resorbed through the roots and assimilated by photosynthesis in the leaves. When the stem of the plant contains chlorophyll, most of the  $\text{CO}_2$  is intercepted in the stem and does not reach the leaves. Radiophotographs show that  $\text{C}^{14}\text{O}_2$  moves along definite lines in the stem, which presumably correspond to vassular-fibrous bundles. An important factor is the evolution of large quantities of oxygen within the stem.

227T2 PA

✓ Participation of oxygen of water and atmospheric oxygen in plant respiration. B. B. Variapetyan and A. L. Kursanov. *Doklady Akad. Nauk S.S.S.R.* 104, 272-4 (1955). -- Expts. with etiolated wheat sprouts using  $H_2O^{18}$ -labeled water and  $O_2^{18}$ -enriched  $O_2$  showed clearly that the source of  $O$  in respiration  $CO_2$  in plants is the  $O$  content of the water. The mol.  $O$  taken in during respiration does not enter the carbohydrate of the respiratory substrate but is utilized for synthesis of  $H_2O$  in plant tissues. G. M. Kosolapoff

①

Name: VARTAPETYAN, B. B.

Dissertation: Research on the oxygen metabolism of plants

Degree: Cand Biol Sci

*defended at*  
~~Academy~~ *Publication*  
Institution: Inst Biochemistry imeni A. N. Bakh, Acad Sci USSR

~~Defense~~ Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 51, 1956

VARTAPETYAN, B. B.

"A Simple Apparatus for Drying Biological Materials in a Frozen State Under a Vacuum (Lyophilic Drying)," Institute of Biochemistry imeni VARTAPETYAN, A. N., Institute of Biochemistry imeni BAKHA, A. N., AS USSR, Fiziologiya Rasteniy, Vol. 3, No. 6, Nov/Dec 56, pp 579-580

Abstract in SUM : 1374

VARTAPETYAN, B. B.

"Use of the Heavy Isotope of Oxygen  $O^{18}$  in the Study of Biological Oxidation in Plants."

Problems Kinetics and Catalysis, v. 9, Isotopes in Catalysis, Moscow, 124-70  
AN SSSR, 1957. 442p.

Most of the papers in this collection were presented at the Conf on  
Isotopes in Catalysis which took place in Moscow, Mar 31- Apr 5, 1956



VARTAPETYAN, B.B.

Traced  $O_{18}$  study of biological oxidation in plants. Probl. kin. 1  
kat. 9:124-128 '57. (MIRA 11:3)  
(Oxidation, Physiological) (Oxygen—Isotopes)

VARTAPETYAN, B.B.; KURSANOV, A.L.

Studying water metabolism of plants by using water containing heavy oxygen ( $H_2O^{18}$ ). Fiziol.rast. 6 no.2:144-150 Apr '59.

(MIRA 12:5)

1. K.A.Timiryazev, Institut of Plant Physiology, U.S.S.R.  
Academy of Sciences, Moscow.

(Plants--Absorption of water)

VARTAPETYAN, B.B.; BOGDANOVA, I.P.

Transformation of catechins as related to the method of their  
oxidation. Biokhimiia 28 no.6: 970-977 N-D'63 (MIRA 17:1)

1. Institute of Plant Physiology, Academy of Sciences of the  
U.S.S.R., Moscow.

VARTAPETYAN, B.B.

Further investigations on water exchange in plants by the use of heavy water  $H_2O^{18}$ . Fiziol. rast. 7 no.4:395-397 '60. (MIRA 13:9)

1. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of Sciences, Moscow.

(Plants--Absorption of water) (Deuterium oxide)

VARTAPETYAN, B.B.

Participation of  $H_2O^{18}$  in the metabolism of photosynthesizing tissues.  
Fiziol. rast. 7 no.4:414-418 '60. (MIRA 13:9)

I. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R., Academy  
of Sciences, Moscow.

(Plants--Metabolism)

(Plants--Absorption of water)

(Deuterium oxide)

VARTAPETYAN, B.B.

Simple laboratory apparatus for fast drying of biological materials  
by the freeze-drying method. Fiziol. rast. 7 no.6:740-741 '60.  
(MIRA 14:1)

1. K.A. Timiriazov Institute of Plant Physiology, U.S.S.R. Academy  
of Sciences, Moscow.

(Freeze-drying)

VARTAPETYAN, B. B. (USSR)

"Tracer Study of Walter Synthesis in Bombyx mori U sing  $^{18}\text{O}_2$ .

Report presented at the 5th International Biochemistry Congress,  
Moscow, 10-16 Aug 1961

VARTAPETYAN, B.B.

Oxygen exchange of plants in experiments with  $O^{18}$ . Izv. AN SSSR.  
Ser. biol. no.2:213-220 M-Ap '61. (MIRA 14:3)

1. Timiryazev Institute of Plant Physiology, Academy of Sciences  
of the U.S.S.R., Moscow.  
(PLANTS—METABOLISM) (OXYGEN—ISOTOPES)



VARTAPETYAN, B.B.; KURSANOV, A.L.

Exchange of water contained in plant tissues and the liquid and  
vaporous water of the environment. Fiziol.rast. 8 no.5:569-575  
'61. (MIRA 14:10)

1. Timirlazev Institute of Plant Physiology, U.S.S.R. Academy  
of Sciences, Moscow.  
(Plants---Absorption of water)

VARTAPETYAN, B.B.; LEBEDEV, G.V.

Biological work of the Institute of the Physical Methods of  
the Separation of Substances of the German Academy of Sciences  
in Berlin. Fiziol. rast. 9 no.6:747-748 '62. (MIRA 15:12)  
(Germany, East--Isotopes--Research)

VARTAPETYAN, B.B.

Rate of water exchange in marine bony fishes. Dokl. AN SSSR 143  
no.3:721-723 Mr '62. (MIRA 15:3)

1. Institut fiziologii rasteniy im. K.A.Timiryazova AN SSSR.  
Predstavleno akademikom A.L.Kursanovym.  
(Fishes--Physiology)(Water in the body)(Trimethylamine)

VARTAPETYAN, B.B.

Mobility of hydrated starch membranes. Dokl. AN SSSR  
147 no.1:221-223 N '62. (MIRA 15:11)

1. Institut fiziologii rasteniy im. K.A. Timiryazeva  
AN SSSR. Predstavleno akademikom A.L. Kursanovym.  
(Starch) (Hydration)

VARTAPETYAN, B.B.; BADANOVA, K.A.

Rate of water exchange in dormant plant organs. Fiziol. rast. 10  
no.1:106-108 Ja-F '63. (MIRA 16:5)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva AN SSSR,  
Moskva.

(Dormancy in plants)  
(Plants, Effect of water on)

VARTAPETIAN, M. E.

"Re-utilization of oxygen by succulent plants."

report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

AS USSR, Moscow.

VARTAPETYAN, B.B.

Polarographic investigation of oxygen transport in plants.  
Fiziol. rast. 11 no.5:774-782 S-O '64. (MIRA 17:10)

1. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy  
of Sciences, Moscow.

VARTAPETYAN, B.B.

Biological synthesis of water. Priroda 53 no.1:78-82 '64. (MIRA 17:2)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva AN SSSR, Moskva.



VARTAPETYAN, B.B.; BOGDANOVA, I.P.

Transformation of tannin in a tea plant under the influence of  
Penicillium expansum. Mikrobiologiya 33 no.5:767-771 S-O '64.  
(MIRA 18:3)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR.

VARTAPETYAN, D.B.

Rate of water metabolism in dormant seeds. Dokl. AN SSSR 159  
no.2:452-454 N '64. (MIRA 17:12)

I. Institut fiziologii rasteniy im. K.A. Timiryazeva AN SSSR.  
Predstavleno akademikom A.L. Kursanovym.

KOST, K.; VARTAPETYAN, B.B.

Diminished mobility of water in a partially dehydrated cell.  
Fiziol. rast. 12 no.3:390-393 My-Je '65. (MIRA 18:10)

1. Natsional'nyy tsentr agronomicheskikh issledovaniy,  
Versal', Frantsiya, i Institut fiziologii rasteniy imeni  
K.A. Timiryazeva AN SSSR, Moskva.

15-57-10-14351

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,  
p 161 (USSR)

AUTHOR: Vartapetyan, B. S.

TITLE: The Problem of Sulfur and Hydrogen Sulfide Gas Formation  
in Seidketanlu (A discussion) / K voprosu ob obrazovanii sery  
i serovodorodnogo gaza v Seidketanlu (v proyadke obsuzhdeniya)

PERIODICAL: V sb.: Vopr. geol. i gidrogeol. ArmSSR, Yerevan,  
AN ArmSSR, 1956, pp 211-216

ABSTRACT: Occurrences of sulfur and segregations of hydrogen  
sulfide gas occur in the vicinity of Seidketanlu  
Mountain in the Vedi : of Armenia. These phenomena  
are confined to the northeastern limb of an anticline  
composed of gypsaceous and sulfur-bearing tuffaceous beds  
of lower Eocene (?) age. The sulfur forms fine dis-  
seminations and small nests in gypsaceous ash clay rocks.  
Card 1/2 The sulfur at Seidketanlu is associated with discharge

The Problem of Sulfur and Hydrogen Sulfide Gas (Cont.) 15-57-10-14351

of hydrogen sulfide, which, on contact with air, decomposes and yields sulfur. The author believes the hydrogen sulfide may be associated with dissociation of gypsum in the presence of organic material and may also come from deep sources.

Card 2/2

V. P. Yeremeyev

VARTAPETYAN, B.S.

Erosion cutoffs of intrusives and corresponding ore formations in  
Armenia [with summary in English]. Sov.geol. 1 no.9:44-57 S '58.  
(MIRA 12:2)

1. Yerevanskiy gosudarstvennyy universitet.  
(Armenia—Ore deposits) (Erosion)

VARTAPETYAN, B.S.

Horizontal mineralogical zoning in the distribution of ore deposits  
in the Armenian S.S.R. Izv. AN Arm. SSR. Ser. geol. i geog. nauk 11  
no.2:33-48 '58. (MIRA 11:9)

1.Yerevanskiy gosudarstvennyy universitet, kafedra poiskov i razvedok  
poleznykh iskopayemykh.

(Armenia--Mineralogy)

VARTAPETYAN, B.S.

New zones of quartz porphyry in the region of Akhtala deposits  
of the Armenian S.S.R. Dokl. All Arm. SSR 27 no.1:49-52 '58.  
(MIRA 11:9)

1.Yerevanskiy gosudarstvennyy universitet. Predstavleno S.S. Mkrtchya-  
nom.

(Akhtala region--Porphyry)



VARTAPETYAN, B.S.

Igneous control of the endogenic mineralization in the Armenian  
S.S.R. Izv.vys.ucheb.zav.;geol.i razv. 3 no.2:92-97 F '60.  
(MIRA 15:5)

1. Yerevanskiy gosudarstvennyy universitet.  
(Armenia--Ore deposits)

VARTAPETYAN, B.S.

Geological position of granitoid intrusives in the Alaverdi-Shamlug-Akhtala ore deposit. Izv.AN Arm.SSR. Geol.i geog.nauki 15 no.5:47-57 '62. (MIRA 15:10)

1. Yerevanskiy gosudarstvennyy universitet i Nauchno-issledovatel'skiy gornometallurgicheskiy institut Sovnarkhoza Armyanskoy SSR.  
(Caucasus—Petrology)

VARTAPETYAN, B.S.; KAZARYAN, A.G.; SHEKHYAN, G.G.; AMIRBEKYAN, E.G.

Recent data on the mineralogy of enclosing rocks in the Kafan  
ore area. Dokl. AN Arm. SSR 37 no.1:25-28 '62. (MIRA 16:11)

1. Nauchno-issledovatel'skiy gorno-metallurgicheskiy institut.  
Predstavleno akademikom AN Armyanskoy SSR K.N.Paffengol'tsem.

VARTAPETYAN, B.S.

Some remarks on S.S. Vaniushin's article "Basic characteristics of the localization of mineralization in the Kafan ore zone." Izv. AN Arm. SSR. Nauki o zem. 17 no.3/4:131-137 '64. (MIRA 17:11)

1. Armyanskiy nauchno-issledovatel'skiy gorno-metallurgicheskiy institut.

VARTAPETYAN, G.A.; PETROSYAN, Z.A.; KHUDAVERDYAN, A.G.

Forbidden E1 transitions in  $Tb^{159}$  and  $Yb^{173}$ . Zhur. eksp. i teor. fiz.  
41 no.6:1704-1709 D '61. (MIRA 15:1)

1. Fizicheskiy institut AN Armyanskoy SSR.  
(Quantum theory) (Terbium) (Ytterbium)

VARTAPETYAN, G.A.

Lifetime and nature of the 686 kev. level in  $\text{Re}^{187}$ . Zhur. eksp. i  
teor. fiz. 41 no.6:1710-1712 D '61. (MIRA 15:1)

1. Fizicheskiy institut AN Armyanskoy SSR.  
(Quantum theory) (Rhenium)

ACCESSION NR: AP4009086

S/0056/63/045/006/1720/1726

AUTHOR: Vartapetyan, G. A.; Khudaverdyan, A. G.; Gatribyan, T. A.

TITLE: Collective effects in the Cs-131 nucleus

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 45, no. 6, 1963, 1720-1726

TOPIC TAGS: Cesium 131, cesium 131 nucleus, collective effects, rotational motion, vibrational motion, single particle motion, even even nucleus, energy level scheme, odd A nucleus, shell model calculation, independent particle model

ABSTRACT: New experimental data on Cs<sup>131</sup> are reported. These include a new 907 keV transition, a half-life  $< 2 \times 10^{-9}$  sec for the 1039 keV transition, and a ratio  $14.5 \pm 3$  for the intensities of the 918 and 907  $\gamma$  transitions. The observed E2 transitions (124, 133, and 495 keV) are found to be accelerated compared with the indepen-

Card 1/12

ACCESSION NR: AP4009086

dent-particle model, thus pointing to the existence of collective effects in the  $\text{Cs}^{131}$  nucleus. It is shown that the intensity ratio of the 918 and 907 keV  $\gamma$  transitions and the characteristics of the 133 keV level are not accounted for by the pure rotational model of L. W. Person and J. P. Rasmussen (Nucl. Phys. v. 36, 666, 1962), and this level cannot have an assignment  $7/2^+$ . It is concluded that the internal structure of the  $\text{Cs}^{131}$  nucleus is changed when it decays from the 124 keV level to the ground state, and it is suggested that the calculations of Person and Rasmussen be repeated with account taken of the existence of two close-lying independent-particle levels (ground and excited 124-keV levels). A more adequate model should take into account the interactions of the rotational, vibrational, and independent-particle motions. "In conclusion, the authors wish to thank A. I. Alikhanyan for his interest, and E. Muradyan, A. A. Tashchyan, and N. Demekhina for assistance with the measurements." Orig. art. has: 3 figures, 7 formulas, and 2 tables.

Card 2/3 ~



L 14- 457 1964  
ACCESSION No. 1964-16636

1964/04/02 1967/1967

AUTORS: Vagstad, G.A.; Garibyan, T.A.; Demokhina, S.A.; Mu adyan, E.G.; Khudaver-  
cyan, A.G.

TITLE: Properties of the levels and radiations of the odd-A nuclei  $Cs^{131}$  and  $Cs^{133}$   
[Report. Fourteenth Annual Conference on Nuclear Spectroscopy held in Tbilisi 14-22  
Feb 1964]

SOURCE: AN SSSR. Izv. Seriya fizicheskaya, v.23, no.10, 1964, 1657-1663

TOPICS: nuclear physics; nuclear radiation; nuclear structure; gamma emission

ABSTRACT: Delayed  $\gamma$ -coincidence measurements were performed with  $Cs^{131}$  (and in one case with  $Cs^{133}$ ) in order to obtain information concerning the nature of the excitation of the nucleus, which may involve collective motions. No results were obtained for  $Cs^{133}$  because of the low activity of the source.

With the aid of the results obtained in this work, it is proposed that the  $\gamma$ -radiation of  $Cs^{131}$  is a transition from a  $2^+$  state to a  $0^+$  state.

114470-5  
ACCESSION NR: AP4048636

133 keV level. This contradicts conclusions drawn from the model of L.W. Person and I.O. Rasmussen (Nucl. Phys. 36, 166, 1962). The half-life of the 620 keV  $\text{Cs}^{131}$  state was measured by triple KX30- $\gamma$ 495- $\gamma$ 124 coincidences, and that of the 438 keV  $\text{Cs}^{133}$  state was measured by a similar method. Both half-lives were found to be less than  $1.0 \times 10^{-10}$  sec. The half-life of the 1039 keV  $\text{Cs}^{131}$  state was found by delayed

of E. Bodenshteyn et al (Nucl. Phys. 20, 557, 1960). The angular correlation of the 495 and 124 keV  $\gamma$ -rays of  $\text{Cs}^{131}$  was examined and an anisotropy of the order of 0.1 was found. It is concluded that the decay of the 620 keV  $\text{Cs}^{131}$  state is a pure  $\beta$ -transition to the 133 keV level of  $\text{Ba}^{131}$ . The decay of the 438 keV  $\text{Cs}^{133}$  state is a pure  $\beta$ -transition to the 133 keV level of  $\text{Ba}^{133}$ . The decay of the 1039 keV  $\text{Cs}^{131}$  state is a pure  $\beta$ -transition to the 133 keV level of  $\text{Ba}^{131}$ .

L 144755

ACCESSION NR: AP:4048636

ASSOCIATION: Fizicheskiy institut Gosudarstvennogo komiteta po ispol'zovaniyu atom-  
noy energii SSSR (Physics Institute, State Committee on the Uses of Atomic Energy  
SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NR REF SOV: 005

OTHER: 020

L 25594-66 EWT(m) DIAAP JD/JG

ACC NR: AP6000903

SOURCE CODE: UR/0022/65/018/004/0094/0100

AUTHOR: Vartapetyan, G. A.; Khudaverdyan, A. G. 61ORG: Physics Institute, GKAE, Yerevan (Fizicheskiy institut GKAE) 12TITLE: Gamma-gamma angular correlation in the nucleus Cs<sup>131</sup> 27

SOURCE: AN ArmSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, v. 18, no. 4, 1965, 94-100

TOPIC TAGS: cesium, radioactive decay, gamma transition, scintillation spectrometer, nuclear spin, gamma quantum, barium, angular distribution

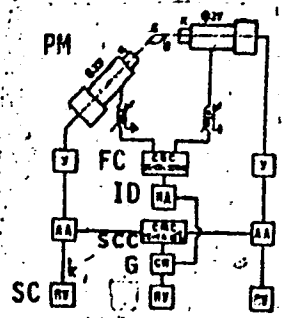
ABSTRACT: Inasmuch as a verification of the existence of an angular correlation for 495--124 kev cascade in Cs<sup>131</sup> can answer uniquely whether the level 124 kev has spin 1/2 or not, the authors have measured this angular correlation using apparatus consisting of two scintillation gamma spectrometers connected for fast-slow coincidences (Fig. 1). The individual units of the apparatus are described in detail. The Cs<sup>131</sup> was obtained from the decay of Ba<sup>131</sup>. The angular distribution was found to be  $W(\theta) = 1 + (0.0063 \pm 0.0015)P_2(\cos\theta) - (0.0005 \pm 0.03)P_4(\cos\theta)$ , where P stands for the Legendre polynomial. The results show that anisotropy is caused by the correlation of the 495 and 124 kev gamma quanta, and this proves that the spin of 124 kev level is 1/2. The ratio of E2 to M1 in the gamma transition of 124 kev is found to be  $0.178 \pm 0.03$ . It follows therefore that 124 kev transition is of the form M1(96.9  $\pm$  0.5)% + E2(3.1  $\pm$  0.5)%, giving an E2 enhancement of the order of 20. The results are discussed in detail elsewhere (Izv. AN SSSR Ser. fiz. v. 28, no. 10, 1964, 1657).

Card 1/2

L 25594-66

ACC NR: AP6000903

Fig. 1. Block diagram of apparatus. S -- source, K -- NaI(Tl) crystals, PM -- photomultiplier, Y -- amplifier, AA -- pulse-height analyzer, FC -- fast coincidence circuit, ID -- integral discriminator, SCC -- slow coincidence circuit, G -- gate circuit, SC -- scaler.



Author thanks A. I. Alikhanyan for interest in the work. Orig. art. has: 7 figures and 5 formulas.

SUB CODE: 20/ SUBM DATE: 10Apr64/ ORIG REF: 007/ OTH REF: 009

Card 2/2

USSR/Human and Animal Physiology. Metabolism.

T

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36109.

Author : Vartapetyan, P.A.

Inst :

Title : The Dynamics and Interrelation of Some Ingredients of  
Nitrogen Metabolism in Rheumatism.

Orig Pub: Sb. nauchn. tr. Resp. Klinich bolnitsy ArmSSR, 1957, 1,  
137-142.

Abstract: No abstract.

Card : 1/1

VARTAPETYAN, P.A., kand.med.nauk

Dynamics of the ballistocardiogram in mitral disease. Trudy Erev.  
med.inst. no.11:231-235 '60. (MIRA 15:11)

1. Iz kafedry fakul'tetskoy terapii (zav. - zasluzhennyy deyatel'  
nauki prof. T.S.Mnatsakanov) Yerevanskogo meditsinskogo instituta.  
(BALLISTOCARDIOGRAPHY) (MITRAL VALVE---DISEASES)

VARTAPETYAN, P.A., kand.med.nauk

Diagram for determining the frequency of cardiac contractions and the duration of individual cycles of cardiac activity by the electrocardiogram. Sov.med. 26 no.6:132-133 Je '62.

(MIRA 15:11)

1. Iz kafedry fakul'tetskoy terapii (zav. - zasluzhennyy deyatel' nauki prof. T.S.Mnatsakanov) Yerevanskogo meditsinskogo instituta.  
(ELECTROCARDIOGRAPHY)



POPOV, I.S.; VARTAPETOVA, Ye.M.; KALMYKOVA, M.V.

Tinea imbricata ("Tokolau"). Vest.vener. no3:51-55 May-Jun 1957 (10:11)

1. Prof. Popov; Assistant Vartapetova; Senior Laboratory Worker  
Kalmykova.



1. Vartapetyan, B.S.
2. USSR (600)
4. Armenia-Copper Ores
7. Spasa-Kara Copper deposits in the Armenian S.S.R. (Abstract.) Izv. Glav. upr. geol. fonl no.3,1947.
9. Monthly List of Russian Accessions. Library of Congress, March 1953 Unclassified.

VARTAPETYAN, B.S.

The controlling structure of the Kafan deposits. Izv.AN Arm.SSR.  
Ser.FMET nauk 1 no.1:33-38 '48. (MLBA 9:8)

1. Armyanskoye geologicheskoye upravleniye.  
(Kafan--Mining geology)

VARTAPETYAN, B. S.

PA 69T46

USSR/Geological Prospecting  
Copper

1948

"The Structure and New Type of Mineralization in  
Zangezur," B. S. Vartapetyan, ArmTsvetMetRazvedka,  
9 pp

"Sovet Geolog" No 29

Discusses general geologic characteristics of Zange-  
zur (Kafanskiy) copper and polymetallic deposits,  
structure of ore field, and new type of mineraliza-  
tion in mine No 7. Describes location, rocks mixed  
with mineral, morphological details, structure, and  
distribution of copper. Brief passage evaluated  
this new type of mineralization.

FDB

69T46

VARTAPETYAN, B.S.

Considering conditions of formation of high-grade nephelitic  
rock of the alkali intrusive Tezhsarskiy massif. Nauch.trudy  
Brev.un. 52:115-122 '55. (MLRA 9:9)

1. Kafedra mineralogii i petografii.  
(Nepheline)

VARTAPETYAN, B.S.

Genesis of pyrite ore formation in Armenia [with summary in English].  
Sov. geol. 3 no.10:60-72 0'60. (MIRA 13:10)

1. Nauchno-issledovatel'skiy gorno-metallurgicheskiy institut pri  
Sovnarkhoze Armenii.

(Armenia--Pyrites)

8570h

S/056/60/038/006/047/049/XX  
B006/B070

14.6720

AUTHOR:

Vartapetyan, G. A.

TITLE:

Lifetime of the 321-keV Level in  $\text{Hf}^{177}$  <sup>9</sup>

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 38, No. 6, pp. 1916 - 1917

TEXT: The line intensities of odd, deformed nuclei correspond only partially to the model of Bohr-Mottelson and Nilsson, partly they show significant deviations. Thus, for example, the ratio of the probabilities of 208- and 321-keV E1 transitions in  $\text{Hf}^{177}$  is found to diverge significantly from the theoretical value. It is of interest to determine the absolute transition probabilities of these two E1 transitions, which are forbidden according to the asymptotic selection rule. This was the object of the present study. If the presence of M2 transitions is assumed, which is not forbidden by the above-mentioned rule, the experimental transition probabilities for adjacent deformed nuclei coincide with the theoretical values. If the M2 admixture in the 208-keV transition is known from the

Card 1/3



85704

Lifetime of the 321-keV Level in  $\text{Hf}^{177}$

S/056/60/038/006/047/049/XX  
B006/B070

measurement of the angular correlation  $(M2/E1)_{208} = 10^{-3}$  and the relative intensities  $I_{\gamma 208}/I_{\gamma 321} = 20$ , the M2 admixture in 321-keV transition and the half-life of the level can be calculated. The values found are:  $(M2/E1)_{321} \approx 0.35$  and  $T_{1/2} \approx 4 \cdot 10^{-10}$  sec. Lifetime and half-life were experimentally determined by the method of delayed coincidences ( $\text{Lu}^{177}: (\beta + e_{113}^-) - \gamma_{208}; \text{Lu}^{177}: \beta - \gamma_{208}; \text{Ru}^{103}: \beta - \gamma_{208}$ ) to be  $\tau = (7 \pm 2) \cdot 10^{-10}$  sec and  $T_{1/2} = (5 \pm 1.5) \cdot 10^{-10}$  sec. The values of the probabilities calculated therefrom are  $P_{\gamma 321}(E1) = 5.5 \cdot 10^{-7} \text{ sec}^{-1}$  and  $P_{\gamma 208}(E1) = 1.4 \cdot 10^{-9} \text{ sec}^{-1}$ . The forbiddenness of the transitions can be determined from a comparison of the theoretical values:  $f_{B321} = 4 \cdot 10^6$  and  $f_{B208} = 3.5 \cdot 10^4$  according to the formula of Weisskopf, and  $f_{H321} = 4 \cdot 10^2$  and  $f_{H208} = 0.6$  according to the formula of Nilsson.

Card 2/3

85704

Lifetime of the 321-keV Level in  $\text{Hf}^{177}$

S/056/60/038/006/C47/049/XX  
B006/B070

A. I. Alikhanyan is thanked for his interest. There are 1 figure and 6 references: 1 Soviet, 2 Danish, 1 US, 1 German, and 1 French.

ASSOCIATION: Fizicheskiy institut Akademii nauk Armyanskoy SSR  
(Institute of Physics of the Academy of Sciences  
Armyanskaya SSR)

SUBMITTED: April 4, 1960

X

Card 3/3

84712

S/056/60/039/001/032/041/XX  
B006/B056

24.6720

AUTHORS: Vartapetyan, G. A., Khudaverdyan, A. G.TITLE: The Level Scheme of  $Ta^{181}$ PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 39, No. 1(7), pp. 25-26

TEXT: The authors investigated the decay scheme of  $Hf^{181}$  by the  $\beta\gamma$ -coincidence method for the purpose of determining the half-life of 619-kev level, which had previously been determined to amount to  $<10^{-8}$  sec. The  $\beta$ -detection was carried out with 2 mm thick anthracene, gamma detection by means of a NaI(Tl) crystal (30X25 mm). Switching of the fast - slow coincidences consisted of energy discrimination channels, a slow coincidence - switching ( $2 \cdot 10^{-6}$  sec) and a fast-coincidence switching ( $5 \cdot 10^{-9}$  -  $2 \cdot 10^{-8}$  sec). Fig. 1 shows the measured coincidence curves ( $e_{133}^- + \beta$ ) -  $\gamma$  and  $\beta$  -  $\gamma$  at 480 kev; analogous measurements at 345 kev gave similar curves. From the results obtained it is concluded

Card 1/3

847k2

The Level Scheme of  $Ta^{181}$

S/056/60/039/001/032/041/XX  
B006/B056

that, contrary to the  $Ta^{181}$  decay scheme (Refs. 2, 3), no 137-keV gamma transition from the 619-keV to the 482-keV level takes place. Measurements further showed that a 619-keV gamma transition exists, which coincides with the 404-keV beta transition. Its half-life was found to be  $< 10^{-9}$  sec. Fig. 2 shows the gamma spectrum coinciding with the 404-keV  $\beta$ -radiation. (An aluminum filter (30 mg/cm<sup>2</sup>) was inserted into the  $\beta$ -channel, like one for the purpose of obtaining the  $\beta$ - $\gamma$ -coincidence curve in Fig. 1. It absorbed the 133-keV conversion electrons.) Photons with 480 and 345 keV were recorded, which coincided with the 136-keV photons. This was proven by the results obtained by the triple coincidences  $\beta_{404} - \gamma_{136} - \gamma_{480}$  and  $\beta_{404} - \gamma_{136} - \gamma_{345}$ . The results obtained by these investigations are summarized as follows: 1) There is no gamma transition with 137 keV from the 619-keV level to the 482-keV level ( $T_{1/2} = 10^{-8}$  sec). 2) There exists a 619-keV gamma transition; two new gamma transitions were found with about 480 and 345 keV, which coincided with the 136-keV gamma transition. 3) The 619-keV level has  $T_{1/2} < 10^{-9}$  sec. It is not identical with the 615-keV rotational level ( $K = 1/2^+ [411]$ ). The authors

Card 2/3

84712

The Level Scheme of Ta<sup>181</sup>

S/056/60/039/001/032/041/XX  
B006/B056

thank A. I. Alikhanyan for his interest and Z. Petrosyan for his help in the experiment. There are 2 figures and 5 references: 2 Soviet, 2 US, and 1 French.

ASSOCIATION: Fizicheskiy institut Akademii nauk Armyanskoy SSR  
(Institute of Physics of the Academy of Sciences, Armyan-  
skaya SSR)

SUBMITTED: February 4, 1960

Card 3/3

S/056/61/041/006/002/054  
B108/B138

AUTHORS: Vartapetyan, G. A., Petrosyan, Z. A., Khudaverdyan, A. G.

TITLE: Forbidden E1 transitions in  $Tb^{159}$  and  $Yb^{173}$

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41,  
no. 6(12), 1961, 1704-1709

TEXT: The authors measured the absolute probability for E1 transitions in  $Tb^{159}$  and  $Yb^{173}$ . The half-life of the 364-keV level of  $Tb^{159}$  was determined by the method of delayed  $\beta$ - $\gamma$  coincidences, using an  $\Phi 3Y-33$  (FEU-33) photomultiplier and a "fast-slow" coincidence circuit with a time resolution of  $6 \cdot 10^{-9}$  sec. The half-life of the 364-keV level was  $(1.7 \pm 0.7) \cdot 10^{-10}$  sec. The half-life of the 351-keV level of  $Yb^{173}$  was measured with the aid of coincidences of 50-keV x-ray photons and 272-keV gamma quanta. The detector system had a time resolution of  $9 \cdot 10^{-9}$  sec. The value found was  $(4.2 \pm 0.7) \cdot 10^{-10}$  sec. The probabilities of

Card 1/3

S/056/61/041/006/002/054  
B108/B138

Forbidden E1 transitions in...

E1 transitions in  $Tb^{159}$  are  $P_{364} = 4 \cdot 10^9 \text{ sec}^{-1}$  and  $P_{225} = 1.2 \cdot 10^8 \text{ sec}^{-1}$ .  
The respective values for the levels of  $Yb^{173}$  are  $P_{351} = 4.7 \cdot 10^7 \text{ sec}^{-1}$ ,  
 $P_{272} = 1.35 \cdot 10^9 \text{ sec}^{-1}$ ,  $P_{171} = 1.65 \cdot 10^8 \text{ sec}^{-1}$ . Two groups of E1 transitions  
were found. The transition probabilities of the first agree well with the  
values calculated after the Nilsson model (S. Nilsson. Mat.-Fys. Medd.  
Dan. Vid. Selsk., 29, 16, 1955), and those of the second differ between  
40 and 530 times from the theoretical values. A. I. Alikhanyan is thanked  
for his interest. Mention is made of B. S. Dzhelepov et al. (Izv. AN SSSR,  
seriya fiz., 22, 795, 1958) and E. Ye. Berlovich et al. (Soobshcheniye na  
XI konferentsii po yadernoy spektroskopii, Riga, 1961). There are  
2 figures, 3 tables, and 16 references: 5 Soviet and 11 non-Soviet. The  
four most recent references to English-language publications read as  
follows: F. Metzger, W. Todd. Nucl. Phys., 13, 177, 1959; O. Nathan,  
V. I. Popov. Nucl. Phys., 21, 631, 1960; K. Toth, O. Nielsen. Nucl. Phys.,  
22, 57, 1961; J. Richard et al. Phys. Rev., 116, 720, 1959.

Card 2/3

Forbidden E1 transitions in...

S/056/61/041/006/002/054  
B108/B138

ASSOCIATION: Fizicheskiy institut Akademii nauk Armyanskoy SSR (Physics  
Institute of the Academy of Sciences Armyanskaya SSR)

SUBMITTED: May 5, 1961

Card 3/3



S/056/61/041/006/003/054  
B108/B138

AUTHOR: Vartapetyan, G. A.

TITLE: Lifetime and nature of the 686-kev level of  $\text{Re}^{187}$

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41,  
no. 6(12), 1961, 1710-1712

TEXT: To check the theoretical predictions of the Nilsson model, the author studied the transition probabilities of the 686 and 511-kev levels in  $\text{Re}^{187}$  and of the 646-kev level in  $\text{Re}^{185}$ . He calculated the transition probabilities of E2 type transitions on the 511 and 646-kev levels, using Nilsson's wave functions. The results were the same as those obtained by the Weisskopf formula, but the values measured with the Coulomb excitation method were by 4-6 times higher. The half-life of the 686-kev level was measured by the method of delayed coincidences ( $\beta - \gamma_{480}$  and  $\beta - \gamma_{686}$ ). A "fast-slow" coincidence device with a time resolution of  $6 \cdot 10^{-9}$  was used. The half-life  $T_{1/2}$  was determined by comparing the curves of the delayed coincidences with the instantaneous  $\text{Co}^{60}$  decay curves. The author found

Card 1/2

Lifetime and nature of the...

S/056/61/041/006/003/054  
B108/B138

that  $T_{1/2} = (2 \pm 0.7) \cdot 10^{-10}$ . The experimentally determined transition probability is six times greater than that calculated by the Nilsson model. This is because the approximation is not correct with respect to strong bonding. The probability of E1 transitions with 686 kev emission was calculated according to the Nilsson model. The value  $2.3 \cdot 10^{10} \text{ sec}^{-1}$  obtained is some 10 times higher than the experimental one. The relatively low energy of the 686-kev level indicates that this level is a one-particle, but not necessarily a vibrational, level. A. I. Alikhanyan is thanked for his interest. There are 1 figure, 1 table, and 9 references: 2 Soviet and 7 non-Soviet. The three most recent references to English-language publications read as follows: C. J. Gallagher et al. Nucl. Phys., 19, 18, 1960; O. Nathan, V. J. Popov. Nucl. Phys., 21, 631, 1960; R. K. Sheline. Rev. Mod. Phys., 32, 1, 1960.

ASSOCIATION: Fizicheskiy institut Akademii nauk Armyanskoy SSR (Physics Institute of the Academy of Sciences Armyanskaya SSR)

SUBMITTED: May 16, 1961

Card 2/2

VARTAPETYAN, G.Sh.

Hydraulic fracturing of slightly permeable dissolved-gas layers.  
Azerb. neft. khoz. 37 no.9:24-25 S '58. (MIRA 11:12)  
(Oil wells--Hydraulic fracturing)

BAYRAMOV, M.M.; BABAYEV, I.S.; VARTAPETYAN, L.I.; BAYDAROV, E.M. [deceased]

Some problems of inadequate performance of siphon units in water supply lines. Za tekhn. prog. 3 no.9:35-37, 48 S '63.

(MIRA 16:10)

1. Bakinskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrogeologii.

VARTAPETYAN, P.A.; MURADYAN, G.T.; TOROSYAN, S.A.

Precordial pains of extracardial origin. Sov. med. 28 no. 7:104-106  
Jl '64. (MIRA 18:8)

1. Klinika fakul'tetskoy terapii (zav. - prof. T.S.Mnatsakanov),  
klinika nevrologii i neyrokhirurgii (zav. - prof. S.G.Zograbyan),  
i klinika nervnykh bolezney (zav. - prof. G.I.Morzoyan) Yerevanskogo  
meditsinskogo instituta.

VARTAPETYAN, P.A.; MNATSAKANOV, T.S., professor, zaslushennyy deyatel' nauki, zaveduyushchiy.

Spring and summer outbreaks of bronchial asthma. Sov.med. 17 no.5:29-31  
My '53. (MLBA 6:6)

1. Fakul'tetskaya terapevticheskaya klinika Yerevanskogo meditsinskogo instituta.  
(Asthma)

VARTAPETYAN, P. A.

Vartapetyan, P. A. -- "Protein and Nitrogen Metabolism in the Active Phase of Rheumatism." Yerevan State Medical Inst. Yerevan, 1955. (Dissertation For the Degree of Candidate in Medical Sciences).

So: Knizhnaya Letopis', No. 11, 1956, pp 103-114

MNATSAKANOV, T.S., prof.; VARTAPETYAN, P.A., dotsent

Frequency phonocardiography. Kardiologiya 4 no.4:83-86  
Jl-Ag ' 64 (MIRA 19:1)

1. Kafedra fakul'tetskoy terapii ( zav. - prof. T.S. Mnatsakanov)  
Yerevanskogo meditsinskogo instituta.



VARTAPETYAN, R., inzhener-elektrik

Contribution of the efficiency promoters of an electric bulb  
factory. Prom.Arm. 5 no.4:48-49 Ap '62. (MIRA 15:5)

1. Yerevanskiy elektrolampovnyy zavod.  
(Eriyan--Electric industries--Technological innovations)

KASPAROVA, S. A., VARTAPETYAN, S. M.

Kola, -c1948-.

Mbr., Lab. Biochemistry and Plant Physiology, Kola Sci. Research Base im. S. M. Kirov,  
USSR Acad. Sci., -c1948-.

"Daily and seasonal carbohydrate metabolism in the potato plant in the arctic,"  
Biokhimiya, 13: 6, 1948. BNL Guide, 2:4, 1949.

VARTAPETYAN, S. M.

TA 6/1978

USSR/Medicine - Potatoes  
Medicine - Climate

Jun 48

"Elimination of the Depressive State of Potatoes  
Under the Influence of Geographic Factors," S. A.  
Kasparova, S. M. Vartapetyan, Kola Base imeni S. M.  
Kirov, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol IX, No 9

Presents data showing effect of northern and southern  
climates on arctic potatoes. Concludes that low  
yield of "polar" potato in other regions is due to  
poor adaptation of its fermentation apparatus, which  
results in a depressive state. This can be eliminated  
by transplanting potato to arctic regions. Toxic sub-  
stances are not present. Submitted 29 Mar 48. Toxic sub-  
stances are not present. Submitted 29 Mar 48. 6/49T56

VARTAPETYAN, S. M.

USSR/Biology - Plant Physiology

Card : 1/1

Authors : Zhurbitskiy, Z. I. and Vartapetyan, S. M.

Title : Effect of boron on the migration of nutritive elements in plants

Periodical : Dokl. AN SSSR, 96, Ed. 6, 1249 - 1251, June 1954

Abstract : Experiments with young plants showed a considerable effect of boron deficiency on the adoption of phosphorus by the plants and particularly on the migration of nutritive elements (phosphorus) from the root system to the sprout above ground. This effect of boron on the migration of mineral nutritive elements as well as on the migration of organic substances emphasizes the great importance of this element. Two references. Tables, illustrations.

Institution : Acad. of Sc. USSR, The S. M. Kirov Branch, Kol'sk

Presented by : Academician A. L. Kursanov, April 12, 1954

Vartapetyan S M

Effect of summer polar day on assimilation and tuber formation in potato. Z. I. Zhurb'skii and S. M. Vartapetyan. *Fiziol. Rastenii* 3, 68-69 (1956).--The response of plants to 24 hrs.-long polar sunlight is uncertain and checks must be made further. Assimilation rate for  $C^{14}O_2$  in a 12-hr. day appears to be 1.5 times greater than in the polar 24-hr. day; the intake of  $C^{14}$  into tubers similarly is 6-7 times greater, the tuber formation is more rapid and flow of metabolites to the tuber more vigorous in the 12-hr. day. N-K fertilizer tends to vitiate the effects of the polar day.  
G. M. Kosolapoff

Kol'sk offil. AS USSR

VARTAPETYAN, S.M.; ONOKHINA, Zh.F.

Diurnal and seasonal rhythm of the metabolism of nitrogenous substances in leaves of the blueberry and the willow herb in polar regions. Dokl.AN SSSR 145 no.6:1404-1407 Ag '62.  
(MIRA 15:8)

1. Polyarno-Al'piyskiy botanicheskiy sad Kol'skogo filiala  
AN SSSR. Predstavleno akademikom A.L.Kursanovym.  
(Nitrogen metabolism) (Arctic regions--Plants--Metabolism)

VARTAPETYAN, V.V.

Characteristics of tomato hybrids produced by reciprocal crossing.

Vest. Mosk. un. Ser. 6: Biol., pochv. 16 no.2:36-43 Mr-Apr '61.

(MIRA 14:5)

1. Kafedra genetiki i selektsii Moskovskogo gosudarstvennogo universiteta.  
(TOMATO BREEDING)

VARTAPETYAN, V.V.

"Features of Hybrids of Tomatoes Obtained from Reciprocal  
Breeding";  
dissertation for the degree of Candidate of Biological Sciences  
(awarded by the Timiryazev Agricultural Academy, 1962)

(Investiya Timiryazevskoy Sel'skokhozyaystvennoy Akademii, Moscow, No. 2,  
1963, pp 232-236)



VARTAPETYAN, V. V., ISAYEV, S. I.,

"Some Biochemical and Physiological Properties of Plant Reciprocal Hybrids."

report submitted for the 11th Intl. Congress of Genetics, The Hague, Netherlands,  
2-10 Sep 63

**"APPROVED FOR RELEASE: 08/31/2001**

**CIA-RDP86-00513R001858710014-6**

**APPROVED FOR RELEASE: 08/31/2001**

**CIA-RDP86-00513R001858710014-6"**

VARTAZAROV, M.H.

136-10-13/13

AUTHORS: Vartazarov, M.A., Lim, S.M.

TITLE: Work of a Production Unit for the Beneficiation of Ore in Heavy Suspension at the Kumyshkanskiy Mine (Rabota promyshlennoy ustanovki po obogashcheniyu rudy v tyazheloy suspenszii na kumyshkanskom rudnike)

PERIODICAL: Tsvetnyye Metally, 1957, Nr 10, pp.88-92 (USSR)

ABSTRACT: The authors give a detailed description of the industrial-scale installation for heavy-suspension concentration built at the Kumyshkanskiy mine following successful preliminary small-scale trials there (Ref.1). The unit is used for sulphide lead-zinc ore according to a scheme shown diagrammatically in the article. Data on the performance of the unit with different ore types are tabulated and some defects detected in operation are discussed. Comparative data for the treatment of a ton of ore by the heavy-suspension and by the flotation methods are given on the following: wages, auxiliary materials, electricity, water and plant expenses. These lead to total treatment costs of 34.79 and 98.38 roubles per ton of ore for the heavy-suspension and flotation methods, respectively, and the capital requirements for the former are given as 4 times less. The presence of a heavy suspension unit is stated to decrease the cost of flotation concentrat-

Card 1/2

136-10-13/13

Work of a Production Unit for the Beneficiation of Ore in Heavy Suspension at the Kumyshkanskiy Mine.

ion: grinding-mill productivity and lining life increase. The Kumyshkanskiy-mine installation is recommended for other branches of the non-ferrous industry, especially where the productivity of plants treating heavy rare metals must be increased, and the production of the appropriate equipment is urged.

There is 1 figure, 4 tables and 1 Slavic reference.

ASSOCIATION: Kumyshkanskiy mine (Kumyshkanskiy rudnik)

AVAILABLE: Library of Congress.

Card 2/2

SLADKOSHTHEYEV, V.T., kand. tekhn. nauk; VARTAZAROV, M.A., inzh.;  
KRUTITSKIY, M.A., inzh.; SHATAGIN, O.A., inzh.

Horizontal continuous casting of nonferrous metals. Met. i  
gornorud. prom. no.1:47-50 Ja-F '62. (MIRA 16:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov  
(for Sladkoshteyev). 2. Khar'kovskiy zavod alyuminiyevykh i  
bronzovykh splavov (for Vartazarov, Krutitskiy, Shatagin).  
(Nonferrous ingots)  
(Continuous casting)

35713

S/136/62/000/003/005/008

EO21/E435

1.1500

AUTHORS: Sladkoshteyev, V.T., Kuritskiy, M.A.,  
Shatagin, O.A., Vartazarov, M.A.

TITLE: Continuous casting of bronze on the horizontal УНИИМ  
(UNIIM) machine

PERIODICAL: Tsvetnyye metally, no.3, 1962, 67-74

TEXT: Production of bronze and brass billets by casting in a mould by normal means has the disadvantages of low production rates and inability to produce billets less than 60 mm in diameter or more than 1000 mm in length. Vertical continuous casting seemed unfavourable for bronze and brass with small cross sectional areas and therefore experiments were carried out on a horizontal continuous casting machine developed by the Ukrainskiy institut metallov (Ukrainian Metals Institute) and the Khar'kovskiy zavod alyuminevykh i bronzovykh splavov (Khar'kov Aluminium and Bronze Alloys Works). The method used is based on a graphite crystallization mould, induction heated at one end and cooled at the other, connected with a metal-reservoir and a chamber for secondary cooling. The whole is capable of reciprocating motion. ✓  
Card 1/2

Continuous casting of bronze ...

S/136/62/000/003/005/008  
E021/E435

Liquid metal is fed from the metal-reservoir through the heated part of the crystallization mould into the cooled part where solidification of the metal takes place with continuous extraction of the billet by a pulling device. The main technical parameters for continuous casting of tin bronze in a round billet were worked out. The quality of the metal completely complies with specifications. A semi-industrial horizontal machine for casting round billets of 25 to 100 mm diameter has been constructed in the Khar'kov Aluminium and Bronze Alloys Works. This enables an increase in annual production of up to 98% and completely mechanizes production. Continuous casting of brass, copper and other non-ferrous metals can be carried out on a horizontal machine. There are 5 figures and 2 tables. y

Card 2/2

SLADKOSHTEYEV, V.T.; SHATAGIN, O.A.; POKITSKIY, M.A.; VARTANOV, L.A.;  
KHALEMSKIY, S.F.

Experiment in operating a horizontal machine for continuous  
bronze casting. TSvet. met. 38 no.2:90 F '65.

(MIRA 18:3)



VARTAZAROV, S. Ya.

"Ice Regime of the Rivers of Armenia," Iz Akad Nauk Armen SSR, No 8, 1946 (3-23).  
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3218, 3 Apr 1953

VARTAZAROV, S. YA.

32478. K voprosu vybora skhem golovnykh uzlov na gornykh rekakh na osnovanii opyta ekspluatatsii. Izvestiya Gruz. nauch.-issled. in-ta gidrotekhniki i melioratsii, t. I, 1949, s. 71-92.--Rezyume na gruz. yaz.

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

30768. VARTAZAROV, S. Ya.

Dvizheniye vnutrivodnogo l'da v potoke. Izvestiya (Akad. nauk. Arm SSR),  
Fiz-matem., estestv. i tekh. nauki, 1949, No. 2, s. 131-52. --Rezyume na arm.  
yaz. -- Bibliogr: 26 nazv.

VARTAZAROV, S. YA.

27075. VARTAZAROV, S. YA., SHMAL'TSEL', N. P. - Iz opyta eksplcatatsii krupnykh derivatsionnykh kanalov. Gidrotekhn. stroit-vo, 1949, No. 8, s. 15=17

SO: Letopis' Zhurnal'nykh Statey, Vol. 36, 1949

CLASSIFICATION		PROCESS AND PROPERTY INDEX		INFO AND ATK. CODES	
SA				B-67	
<p>OPERATIONAL TEST OF THE TAIL RACE OF HYDRO-ELECTRIC STATIONS IN DERIVATION.  S. Ya. Vartazarov and E. P. Fedorov. Gidrotekh. Stroit. (No 3) 24-8 (1950)  In Russian.</p>					
<p>It is important that the tailrace be dimensioned for the total water volume in all hydraulic conditions which can arise in the derivation, and unstable and transient conditions must especially be considered, on account of the great length of these tailraces. (A series of different types, taken from existing stations, is individually discussed.) Particular attention must also be devoted to the joints in the facing or rendering of the race, as frequently infiltrations were found to endanger the sub-structures. The setting up of longitudinal, building-up waves can only occur where the gradient exceeds 0.015-0.02, on straight sections of more than 300-400 m length and with a smooth facing.</p>					
B. F. Kraus					
<p>43-114 METALLURGICAL LITERATURE CLASSIFICATION  1304 114 0114</p>					

VARTAZAROV, S. Ya.

USSR/Engineering - Hydraulics

Oct 50

"Bacterial Corrosion of Metal Pressure Pipelines,"  
S. Ya. Vartazarov, Cand Tech Sci

"Gidrotekh Stroi" No 10, pp 25-28

Iron bacteria, using for their growth ferrous salts of iron dissolved in water, form deposits of ferric hydroxide on submerged objects. This type corrosion on inner surfaces of pipelines causes pressure losses sometime to 12-13% and leads to decrease in thickness of pipe walls from fraction of mm to 5-6 mm. Discusses preventive measures, although, it is emphasized, protective coatings for complete elimination of phenomenon are not yet developed.

182T59

USSR/Engineering - Hydraulics, Power Stations Feb 52

"Second Transcaucasian Conference on Planning and Construction of Hydroelectric Power Stations,"  
I. G. Gvlesiani, S. Ya. Vartazarov, Candidates  
Tech Sci

"Gidrotekh Stroi" No 2, pp 44-46

Conference in Tbilisi Nov 51, for exchange of information among construction, planning, scientific research and operational organizations. Briefly describes reports, delivered at Conference, and outlines suggestions detg future trend

212768

of activity in discussed field. Next conference is scheduled for 1952 in Yerevan.

VARTAZAROV, S. YA.

212768

VARIKAZAROV, S. G. A.

Organization and methods of operation of hydroelectric power stations Moskva, Gos.  
energ. izd-vo, 1953. 96 p. (53-33430)

TK1081.V3



VARTAZAROV, S.Ya.; SOKOLOV, I.M. [authors]; KRASIIVSKIY, S.P., inzhener [reviewer].

"Organization and methods of operation of a hydroelectric power station."

S.IA.Vartazarov, I.M.Sokolov. Reviewed by S.P.Krasivskii. Elek.sta. 24  
no.8:63-64 Ag '53. (MLRA 6:8)

(Hydroelectric power station) (Vartazarov, S.IA.) (Sokolov, I.M.)

VARIAZMAK 2 ja

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[Ice conditions in rural diversion hydroelectric stations] ledovyi rezhim derivatsionnykh sel'skikh gidroelektrostantsii. Moskva, Gos.izd-vo lit-ry po stroitel'stvu i arkhitekture, 1955. 173 p. (MIRA 9:2)

(Hydroelectric power stations) (Ice)

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ABSTRACT: Conditions of frazil-ice flow in diversion canals are described, and examples of frazil-ice spillover devices are cited; hydraulic peculiarities of a frazil-ice-and-water stream are noted, as well as the need to consider these peculiarities when designing a canal route — particularly its transfer sections. Conditions of water-mass motion in reservoirs and its influence upon the accumulation of frazil ice and simple ice are considered, as well as conditions of water and ice-and-water streams entering and leaving the reservoir, and the conditions of penetration of subsurface ice into the turbines. An example of frazil-ice transport across the upper pool is described. Flow of ice-and-

Card 1/2

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**Selection of Ice-Control Measures at Hydroelectric Stations**

water stream in pipelines, conditions of clogging them with frazil ice and ice, and opportunities to pass the ice via penstocks and turbines are examined. Recommendations are given on how to organize ice-control measures by changing the thermal characteristics of the water stream, as well as recommendations on design and layout of multiple-use hydro developments. Operation of structures and stations under various ice-flow conditions and peculiarities of ice control in channel-type and diversion-type hydroelectric stations are noted.

Ye.I.D.

Card 2/2